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NPIC/P&DS/D/6-1313
22 April 1966

MEMORANDUM FOR THE RECORD

25X1 SUBJECT: Visit [redacted] 13-14 April 1966

REFERENCE: Step & Repeat Contact Printer (Project #99761-4), Dry Photo Process Study, Film & Paper (Projects #997103 & 998495), and Field Dry Process Printer (Project #997296)

25X1 ATTENDEES [redacted]

25X1 1. The visit [redacted] was opened with discussions concerning emulsion adhesion to the plastic film base and the possibility of devising a test for measuring the adhesion. Since there are no tests for measuring emulsion adhesion within the photographic industry, [redacted] personnel suggested the use 25X1 of the "Scotch Tape Test" which is generally used for testing organic soluable coatings. It was stated that there was a Mill Standard for the test and that this would be used as the basis for determining a satisfactory emulsion adhesion.

25X1 2. [redacted] asked what the general use and viewing conditions would be for the dry process film. It was stated that the film would be subject to scratches on rollers and viewing surfaces on light tables and would also be subject to the cooling liquids and high temperatures of modern rear projection viewers.

3. The latest version of films and paper coatings were demonstrated. These samples indicated a breakthrough in the area of image quality and background tint. In contrast to the previous orange and yellow-brown background tint, the new sample displayed an almost clear base. The film displayed 18-20 grey scale steps and the paper 12-14 steps. [redacted] personnel 25X1 indicated that the image characteristics were controllable by variations of exposure and/or development so that conventional photographic manipulations could be imitated with dry process silver techniques.

25X1 4. [redacted] stated that dry process paper requirements could be broken down into three areas: (1) contact papers, (2) enlargement papers, and (3) an urgent need for dry process reversal papers. It was further stated that the need for reversal process is so urgent that a slight reduction in characteristics such as resolution, grey scale, etc., would 25X1 be acceptable. [redacted] stated that [redacted] would take another look into

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this area (at company expense) to determine what the chances of success would be, especially in view of recent successes with normal dry process silver developments.

5. Parameters and goals for the development of dry process papers were discussed and suggestions as to practical development objectives were made. It was suggested that testing procedures be more realistic and representative of natural conditions. It was requested that humidity test requirements be changed from 30-40% up to 75% relative humidity.

6. A demonstration of the newest paper used both as contact and as enlargement paper was given. A demonstration of the newest film exposed in a camera with a flash attachment was also given. The results of this effort were not very good.

7. The breadboarded Step and Repeat Contact Printer was shown and demonstrated. A sample of the latest batch of film was processed at varying speeds to demonstrate different development characteristics. The prototype printer is still at [redacted] 25X1
undergoing final assembly and testing. It was expected that the unit will be completed by 30 June, however, I have since been informed that [redacted] 25X1
25X1 [redacted] is behind schedule and will need another time extension.

8. The basic paper processor (approximately 45" x 6" x 6") was shown and demonstrated. This unit is an off-the-shelf item which will be modified by the addition of a speed control so that processing times can be adjusted for desired results.

9. The parameters of a possible condensed "fly away kit" dry film printed processor were discussed. [redacted] personnel indicated that the goals 25X1
seemed to be very well within the state-of-the-art, although exact configurations would depend upon the final characteristics of the dry process silver emulsions developed.

[redacted] 25X1
Development Branch, P&DS

Distribution:
Original - Project File/DB (#99701)
1 - Project File/DB (#99703)
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